

SUMMARY ASSESSMENT OF DAMAGE AND NEEDS

1. **Overview.** The Islamic City of Marawi is the capital of the province of Lanao del Sur, one of five provinces of the Autonomous Region in Muslim Mindanao (ARMM) in the Philippines. With a population of around 201,785 (PSA, 2015), it is the largest urban center in the ARMM. It is a center of commercial activities and institutional services that attract many to find work and settle in the City.

2. The siege of Marawi City by the combined forces of the Maute Group, Abu Sayyaf Group led by Isnilon Hapilon, and supported by foreign jihadists is part of a prolonged conflict that has exacerbated the socio-economic conditions in the conflict-affected areas. While Marawi was the epicenter for the recent armed conflict, the province of Lanao del Sur has long been the epicenter of conflict between multiple groups and clans, often resulting from competition over access to and control of land and resources. Lanao del Sur has the highest incidence of poverty among all provinces in the Philippines, with 71.9% of the population living below the annual per capita poverty threshold of about \$442.8 (P22,802) in 2015 compared with 53.7% for the entire region of ARMM and 21.6% nationally. This extreme poverty combined with land dispossession, social exclusion, and constrained access to basic services as exacerbated the long-standing conflicts in the region, including the Bangsamoro struggle for self-determination, led by the Moro Islamic Liberation Front and the Moro National Liberation Front, and the struggle of the Communist Party of the Philippines.

3. **Post-conflict needs assessment (PCNA).** Administrative Order No. 3 established the Task Force Bangon Marawi (literally translated as Rise Up, Marawi) (TFBM) in June 2017. One of the mandates of the TFBM is the conduct of a post-conflict needs assessment (PCNA) to inform the formulation of the Bangon Marawi Comprehensive Rehabilitation and Recovery Plan. In consonance with this mandate, the National Disaster Risk Reduction and Management Council (NDRRMC), through its secretariat, the Office of Civil Defense, coordinated the activities related to the PCNA. Training activities were conducted based on a localized damage and loss assessment tool. With the conclusion of the siege in October 2017, the NDRRMC deployed teams composed of sectoral representatives from the national, regional, and local governments. Preliminary results were presented to the development partners and other institutions in December 2017.¹

4. **Human Impact.** The five-month long siege of Marawi resulted in massive displacement of communities. Based on the Bangon Marawi Comprehensive Rehabilitation and Recovery Program a total of 369,196 individuals were displaced by the crisis.² These internally displaced persons (IDPs) were brought to emergency shelters mainly in Lanao del Sur, Lanao del Norte, and Iligan City. Due to congestion in these emergency shelters, many families opted for a home-based arrangement with close relatives and friends.

5. The conflict also resulted in casualties and injuries. Government reports 168 casualties from the government forces; 114 civilians; 270 unidentified individuals; and 924 from the rebel forces. Around 88 individuals were also reported missing by their relatives. Among the civilian casualties, an undisclosed number of these deaths occurred in emergency shelters and health

¹ The final version of the PCNA was not published and/or distributed.

² Based on estimated IDPs from 2018. *Bangon Marawi Comprehensive Rehabilitation and Recovery Program*. Manila, and Philippines: Humanitarian Bulletin, Issue No. 10, November 2018, Official United Nations Office for the Coordination of Humanitarian Affairs. The figure for remaining IDPs is an estimate.

facilities due to pneumonia, sepsis, and complications from acute gastroenteritis, per reports of the Department of Health.

6. **Immediate disaster relief.** In response to the emergency needs of the IDPs, the Government has initially allocated \$93.8 million (P5.0 billion) budget in over 100 shelters. Over 100 organizations, both local and international, have extended assistance to attend to the massive humanitarian needs of the displaced. Apart from the ARMM, national government agencies also mobilized field offices in Regions 10, 11, and 12 to provide psycho-social and medical services to the IDPs. Based on the human recovery needs assessment (HRNA) undertaken by the Government during the early phase of displacement, IDPs expressed concerns over unsatisfactory delivery of services in the evacuation centers, poor quality of facilities (e.g., limited availability of comfort rooms, poor solid waste management, etc.), non-issuance of disaster family access cards to extended families and single parents; irregular provision of health service to far-flung evacuation centers, and non-equitable distribution of relief goods/assistance to families, regardless of size. Emergency shelters are also not designed to meet specific cultural needs, such as the segregation of males and females.

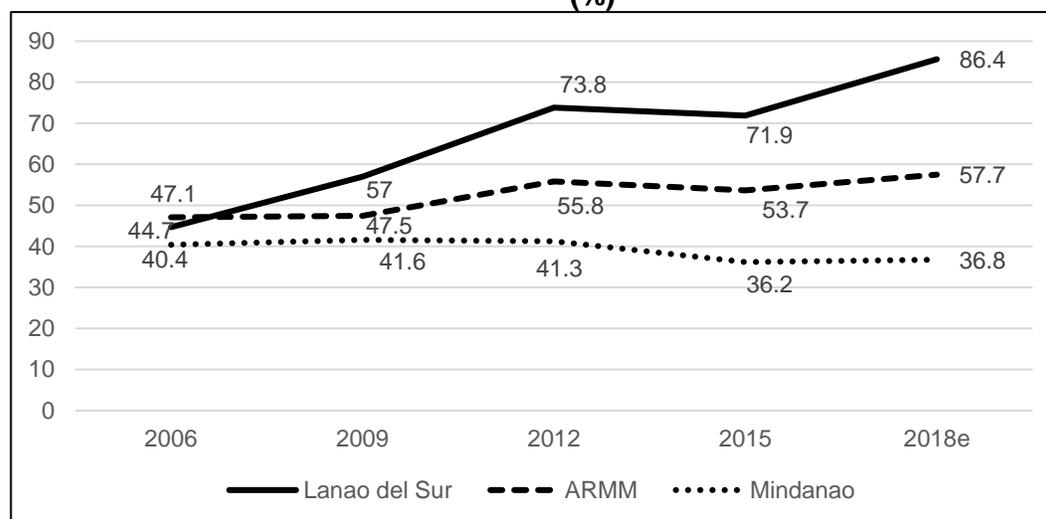
7. **Economic Impact.** The economic impact of the conflict is expected to significantly suppress ARMM's economic growth in 2017 and 2018. The displacement of farmers and loss of crops, and the destruction of schools, hospitals, and markets will hold back the region's economic prospects. The total damages and losses of \$348 million (P18.6 billion) is equivalent to about 16.7% of ARMM's 2016 GRDP and 0.12% of the country's 2016 gross domestic product (GDP), translating into an estimated contraction of real GRDP in 2017 by 6.3%. The private sector's share of these losses amounts to \$124 million (P6.631 billion) or 6.0% of ARMM's GRDP. Marawi City, a commercial center of Lanao del Sur and ARMM, experienced stagnant growth before the crisis, and does not have sufficient resources to overcome the damages and losses. In 2018, ARMM's economic contraction is expected to moderate to some extent as IDPs start to return home, and the reconstruction and restoration of productive assets gets underway. However, recovery will be slow and modest without substantial assistance.

8. The agriculture and trading service sectors are expected to be the most severely hit by the crisis. Agriculture suffered damages due to the destruction of agriculture and post-harvest machinery and equipment, including privately-owned rice mills servicing Marawi and Lanao del Sur. The MAA includes the central business district. Around 70% of the city's economic activities pertain to trading. As the Marawi siege occurred three days before the start of Ramadan, businesses had stockpiled inventory in anticipation of the huge demand. As a result, there was massive loss of inventory, raw materials, goods, products, and equipment used in production.

9. **Poverty Impact.** The incidence of poverty in Lanao del Sur is expected to increase in the immediate aftermath of the crisis as the regional economy contracts, unemployment rises, and food prices spike during the early emergency relief phase. ADB simulations of the poverty impact of the conflict estimate that the number of people below the poverty line could increase by about 150,000 because of the magnitude of the damage in Marawi, the destruction in public infrastructure, and services, and the high share of families that were already vulnerable to falling into poverty before conflict. ADB estimates that the poverty rate in Lanao del Sur may increase by more than 13 percentage points in 2018, compared to 2016 (Figure 1). Some families may be able to mitigate the risk of falling into poverty, so actual poverty rates could be lower than those projected. Nevertheless, the already high incidence of poverty in Lanao del Sur will likely remain elevated for some time, as many families have lost income generating assets. The poverty gap, which measures the severity of poverty as an average of how far people are below the poverty line, will also increase in the most affected areas. The implication of the larger poverty gap is that

not only will more people be impoverished because of the damage caused by the conflict, but the previously poor will become poorer.

Figure 1: Estimated Impact on Poverty in Mindanao (%)



Note: (i) The 2018 estimates are based on a 2.3% annual population growth rate since the 2015 census and the assumption that about 70% of previously non-poor IDPs will become poor.

Source: Philippine Statistics Authority Family Income and Expenditure Survey 2015 and ADB estimates

10. **Fiscal Impact.** The overall impact on the Philippines' national fiscal space is expected to be moderate. Given the small size of the Lanao del Sur formal economy, forgone tax revenues are likely negligible. However, the crisis may put pressure on the national fiscal position because of the significant reconstruction and rehabilitation costs largely shouldered by the national government. The Marawi disaster relief budget (P19.5 billion) is equivalent to 0.52% of the 2018 national budget (P3,767 billion). This amount to is equivalent to 58.2% of the 2018 national budget allocation for ARMM (P33.05 billion). So, the fiscal cost of Marawi is very high in comparison with the budget for ARMM. For 2018, the government has set aside a total of \$187.5 million (P10 billion) for reconstruction and rehabilitation.

11. **Total Damage and Loss Estimates.** Estimates of damage and loss to public and private property were done for the infrastructure, productive, and social sectors, and for the cross-cutting concerns on governance and environment (refer to Table 1). Damages were estimated at \$216 million (P11.5 billion) and losses at \$132 million (P7.0 billion), with most of these impacts incurred in the 24 barangays comprising the most affected areas (MAA) where the gun fight was heaviest. Marawi City is the economic and political capital of the province of Lanao del Sur and is one of the biggest urban areas in the entire ARMM region. As such, many commercial and institutional facilities can be found in the City, particularly in the MAA, which includes the central business district. As such, there was a heavy concentration of economic, cultural, and public administration assets in these barangays. The Grand Mosque of the Maranaos and the Grand Padian (or market) were among those that were damaged during the battle in the MAA.

12. Outside Marawi City, the rural municipalities of Piagapo and Butig also witnessed the violent conflict. The town of Butig was attacked prior to the siege of Marawi and the municipal hall was among the damaged. Albeit the cost of damage and loss is small, these are small impoverished towns that will find difficulty in addressing the impact of the conflict on their own.

Butig is a sixth income class municipality, while Piagapo is a fourth income class, per government classification. Both have predominantly agriculture-based economies. Collectively, these towns incurred \$0.82 (P43.7M) in damages and \$0.58 million (P31.0 M) in losses.

13. While the Government considers only the city of Marawi and the municipalities of Butig and Piagapo as the directly affected areas by the conflict, several contiguous localities also had to carry the burden of the siege. Due to the large displacement caused by the siege, many of the internally displaced persons (IDPs), which numbered to a total of 369,921 individuals (equivalent to around 77,170 families) were brought to emergency shelters in different localities, up to as far as Iligan City. As hosts to IDPs, these LGUs stretched their existing resources to contribute to the enormous humanitarian tasks at hand.

Table 1: Summary of damage and loss, by sector and by type of ownership^a
(as of 08 August 2018)

Sector	Damage		Loss		Needs
	Private	Public	Private	Public	
	(In Philippine Pesos, '000)				
Infrastructure Sector	13,314	93,481	305,400	360,160	17,111,569
Power	-	54,294	-	87,779	157,517
Transportation	-	22,223	-	147,329	16,814,701
Water and sanitation	-	16,964	-	125,052	131,331
Telecommunications ^b	13,314	-	305,400	-	8,020
Productive Sector	552,200	-	4,150,438	180	18,446,873
Agriculture	87,068	-	333,093	180	772,172
Industry, Trade, and Services	-	-	3,727,939	-	17,216,381
Tourism and Culture	465,132	-	89,406	-	458,320
Social Sector	6,440,491	1,469,343	2,175,242	6,196	10,038,089
Education	29,190	1,408,596	11,665	703	1,489,236
Health	264,000	60,747	107,100	5,493	356,643
Housing	6,147,301	-	2,056,477	-	8,192,210
Cross-Sectoral	-	2,940,639	-	52,280	6,057,573
Government	-	2,940,639	-	52,280	3,648,039
Environment	-	-	-	-	2,409,534
Total	7,006,005	4,503,463	6,631,080	418,816	51,654,104

Source: Government of the Philippines, National Economic and Development Authority-Regional Development Office. 2018. Bangon Marawi Comprehensive Rehabilitation and Recovery Program, Draft Report. Manila.

Damage to private industry, services is covered under "Housing" as almost all the stores are located on the ground floor of or within the residences of the business owners.

14. **Sectoral impacts.** The PCNA estimates that the total damage and loss brought about by the Marawi reached \$348 M (P18.6 B). The social sector incurred the most damage and loss, accounting for 54% of the total, followed by the productive sector (25%), cross-sectoral, *i.e.*, governance (16%), and infrastructure (4%).

15. **Social Sector.** Damage and loss incurred by the housing subsector accounts for the largest impact in the social sector, followed by education and health. The destruction of private homes in the MAA can be considered as the most serious impact of the siege. Most Maranao traders have therefore designed their homes to double up as shops. The destruction of houses particularly in the MAA also crippled the trading activities in the City. Government estimates that

majority of the 5,627 dwelling units within the MAA were completely damaged by the violence. The housing subsector is also the most affected in the municipality of Butig.

16. Educational facilities were not spared during the siege. Dansalan College, a denominational educational institution, was among the first set of structures that were destroyed by the rebels. Of the 69 public schools under the Marawi City Schools Division's authority, 22 schools with 569 classrooms were seriously damaged and remain inaccessible within the MAA. The damage and displacement have disrupted the learning of more than 86,000 children and displaced 22,174 students and 1,411 teachers from Marawi City.

17. Several health facilities, both public and private, reported incurring damages and/or losses as a result of the siege. The rebels even attempted to take over the Amai Pakpak Medical Center but was foiled by the military forces. However, the hospital facility suffered from several gunshots as a result of the military offensive. Urban health units and barangay health stations and health posts, particularly those in the MAA are rendered unusable, creating a big gap in the health service delivery capacity of the City. This is exacerbated by the damage and loss incurred by the private health providers. According to the assessment undertaken by the DOH-ARMM, private health providers account for 95% of the losses arising from destroyed facilities and lost medical equipment and supplies. The Marawi City Health Office and the Integrated Provincial Health Office of Lanao del Sur also suffered losses from the looting of equipment and medical supplies.

18. **Productive Sector.** The agriculture and trading service sectors are the most severely hit by the crisis. Around 70% of the city's economic activities pertain to trading. Per records of the Department of Trade Industry, around 84% are micro-enterprises (i.e., investment worth below P3.0 million), while the other 16% are considered small enterprises (i.e., investment worth between P3.0 to P15.0 million); only 0.3% were considered medium enterprise (investment worth between P15 million but not exceeding P100 million). These enterprises were mainly engaged in selling clothing, grocery items, construction supply, general merchandise, and jewelries. As the Marawi siege occurred three days before the start of Ramadan, businesses had stockpiled inventory in anticipation of the huge demand. As a result, there was massive loss of inventory, raw materials, goods, products, and equipment used in production, to gunfighting and looting. Damage to public markets has also severely impacted the livelihoods of small business traders, including by a lack of access to markets and the destruction of value chains and previous relationships with other vendors.

19. Agriculture suffered damages due to the destruction of agriculture and post-harvest machinery and equipment, including privately-owned rice mills servicing Marawi and Lanao del Sur. Crops were destroyed in the towns of Butig and Piagapo as the gunfighting between the military and rebel forces occurred in open farmlands.

20. Known for its cool weather, tourism has been identified as a potential growth driver for the City. Tourism is primarily hinged on the cultural assets of the City. However, in the course of the siege, a total of 30 mosques, including the Grand Mosque, and 10 madrasas/torils were damaged, which is a serious blow to the tourism development efforts of the City.

21. **Cross-sectoral.** Initial rebel activities focused on the occupation or destruction of key government facilities. The Marawi City Hall and the Amai Pakpak Medical Center are among the first that were targeted for occupation, but both efforts were thwarted by the military.

22. Clearing of unexploded ordnances and the debris in the MMA areas besets the recovery and rehabilitation efforts of the Government. Nearly one year has transpired since the liberation of Marawi and the military is still combing the city for bombs, improvised explosive devises, land mines, and other ordnances. The volume of debris created by the siege is estimated to be at least 1.0 million tons, which is a challenge that must be overcome by the City with the assistance of the Department of Environment and Natural Resources. Completion of these efforts are expected to be completed in two years of the four-year reconstruction timeframe.

23. **Infrastructure.** The PCNA identifies approximately 21 road sections damaged inside the MAA caused by the air attack and movement of heavy military equipment and armored vehicles. The assessment revealed that the road pavements suffered from potholes, multiple cracks, craters, road cuts, shattered slabs and canals. Three bridges crossing the Agus River were partially damaged caused by gunshots and explosives, requiring further structural assessment.

24. Power distribution facilities owned by the Lanao del Sur Electric Cooperative (LaSurECo) were seriously damaged, especially those that were located inside the MAA. Outside these 24 barangays, the facilities were cut during the siege. Replacement of looted assets, repair of damaged facilities, and disrupted service comprise losses for LaSurECo

25. Prior to the siege, the water supply system was operating below efficient levels. The core infrastructure was built more than five decades ago, which was servicing mostly the areas now considered as the MAA. The inadequacy in water supply facilities was exacerbated by the siege, with the total destruction of one pumping and its linked distribution pipes and looting of generators and vehicles. The office of the MWCD will also require structural investigation following the series of bombing and shelling.

26. Telecommunication facilities, which are predominantly privately owned, were either fully destroyed or looted during the siege. The Department of Information and Communication Technology, which held office inside the MAA, reported looting of their equipment.

27. **Estimates of Recovery Needs and the BMCCRP.** The PCNA estimates that a total of \$969 million (P51.7 billion) is required to finance the full recovery and rehabilitation of Marawi and affected areas, broken down as follows: productive sector (36%); infrastructure sector (33%); social sector (19%), and cross-sectoral (12%) (refer to Table 1).

28. The recovery needs established in the PCNA informed the strategies and priorities in the CRRP, but it should be noted that this is a \$83.5 million (P4.5 billion) difference between the recovery needs and the final CRRP funding requirements. The current CRRP does not yet integrate the funding needs for the 24 affected barangays in the MAA, which the Government envisions to be funded upfront by a private sector partner. The CRRP has identified 744 programs, projects, and activities in the following sectors (refer to Table 2).

29. The BMCCRP focuses on the following priorities:

- (a) Restoration, rehabilitation, and reconstruction of damaged infrastructure to revitalize the local economy and restore social services;
- (b) Rebuilding of resettlements in accordance with the spatial framework and urban design that showcases the Maranao culture;
- (c) Restoration and improvement of livelihood, business, and other sources of income;
- (d) Strengthening local governance as means to achieve peace and progress; and

(e) Increasing resilience and capacities of communities in coping with future hazards.

**Table 2: Bangon Marawi Comprehensive Rehabilitation and Recovery Plan
Summary of Investment Requirement, per Sector
(as of 08 August 2018)**

Sector	Number of PPAs	Short-Term (in PM)	Long-Term (in PM)	Total (in PM)
		2018	2019-22	
Physical Infrastructure	237	5,856	15,819	21,675
Social Services	68	4,577	541	5,118
Housing and Settlement	29	4,684	5,542	10,226
Livelihood and Business Development	267	5,391	2,081	7,472
Local Governance and Peacebuilding	112	670	36	706
Land Resource Management	31	831	1,173	2,004
Total	744	22,009	25,192	47,201

Source: Government of the Philippines, National Economic and Development Authority-Regional Development Office. 2018. Bangon Marawi Comprehensive Rehabilitation and Recovery Program, Draft Report. Manila.